



PUBLIC HEALTH FACT SHEET

Anthrax

The Disease

Anthrax is a serious disease caused by *Bacillus anthracis*, a bacterium that forms spores. A spore is a cell that is dormant (asleep) but may come to life with the right conditions.

There are three types of anthrax:

- skin (cutaneous)
- lungs (inhalation)
- digestive (gastrointestinal).

Anthrax is not known to spread from one person to another.

Humans can become infected with anthrax by handling products from infected animals or by breathing in anthrax spores from infected animal products like raw, untreated wool.

People also can become infected with gastrointestinal anthrax by eating undercooked meat from infected animals.

Symptoms

The symptoms of anthrax are different depending on the type of the disease.

Cutaneous

The first symptom is a small sore that develops into a blister. The blister then develops into a skin ulcer with a black area in the center. The sore, blister and ulcer do not hurt.

Gastrointestinal

The first symptoms are nausea, loss of appetite, bloody diarrhea and fever, followed by bad stomach pain.

Inhalation

The first symptoms of inhalation anthrax are like cold or flu symptoms and can include a sore throat, mild fever and muscle aches.

Later symptoms include cough, chest discomfort, shortness of breath, tiredness and muscle aches.

Symptoms can appear within seven days of coming in contact with the spores for all three types of anthrax. For inhalation anthrax, symptoms can appear within a week or can take up to 42 days to appear.

Diagnosis

Anthrax can be diagnosed by the use of various medical tests including taking samples of blood, skin lesions, or respiratory secretions. A chest X-ray may also be taken if inhalation anthrax is suspected. Nasal swabs are not useful in diagnosing anthrax infection.

Treatment

Antibiotics treat all three types of anthrax. Early identification and treatment are important. Success depends on the type of anthrax and how soon treatment begins.

- In most cases, early treatment with antibiotics can cure cutaneous anthrax. Even if untreated, 80 percent of people who become infected with cutaneous anthrax do not die.
- Gastrointestinal anthrax is more serious because between 25 percent and more than 50 percent of cases lead to death.
- Inhalation anthrax is much more severe. In 2001, about half of the cases of inhalation anthrax ended in death.

Reducing the Risk

Treatment is different for people who have been exposed to *B. anthracis*, but are not sick. Healthcare providers will use antibiotics combined with the anthrax vaccine to prevent anthrax infection.

Anthrax and Bioterrorism

According to the Centers for Disease Control and Prevention (CDC), *B. anthracis* could be used as a biological weapon, resulting in sickness and death.

For More Information Contact

- Your healthcare provider
- Your local department of health
- The New Jersey Dept. of Health and Senior Services, Communicable Disease Service at (609) 588-7500
- You can also visit the following websites:

--The New Jersey Department of Health and Senior Services website at www.nj.gov/health

--The CDC website at <http://www.bt.cdc.gov/agent/anthrax>.